

10/531415

WO 2004/037278

1/10

PCT/EP2003/011525

JC12 Rec'd PCT/PTC 15 APR 2005

Sequenzprotokoll

<110> Universität Münster

<120> Dyslokationsmoleküle

<130> P057744

<160> 13

<170> PatentIn version 3.1

<210> 1

<211> 497

<212> PRT

<213> künstliche Sequenz

<223> Aminosäuresequenz von GFP-M&M

<400> 1

Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
1 5 10 15

Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
20 25 30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
35 40 45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
50 55 60

Leu Thr Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
65 70 75 80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
85 90 95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
100 105 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
115 120 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
130 135 140

Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
145 150 155 160

Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
165 170 175

Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
180 185 190

Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu
195 200 205

Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
210 215 220

Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys Gly
225 230 235 240

Thr Val Ile Ala Asn Tyr Leu Pro Asn Arg Thr Asp Val Gln Cys Gln
245 250 255

His Arg Trp Gln Lys Val Leu Asn Pro Glu Leu Ile Lys Gly Pro Trp
260 265 270

Thr Lys Glu Glu Asp Gln Arg Val Ile Glu Leu Val Gln Lys Tyr Gly
275 280 285

Pro Lys Arg Trp Ser Val Ile Ala Lys His Leu Lys Gly Arg Ile Gly
290 295 300

Lys Gln Cys Arg Glu Arg Trp His Asn His Leu Asn Pro Glu Val Lys
305 310 315 320

Lys Thr Ser Trp Thr Glu Glu Asp Arg Ile Ile Tyr Gln Ala His
325 330 335

Lys Arg Leu Gly Asn Arg Trp Ala Glu Ile Ala Lys Leu Leu Pro Gly
340 345 350

Arg Thr Asp Asn Ala Ile Lys Asn His Trp Asn Ser Thr Met Arg Arg
355 360 365

Lys Val Glu Gln Glu Gly Tyr Gly Ser Ala Thr Ser His Thr Met Ser
370 375 380

Thr Ala Glu Val Leu Leu Asn Met Glu Ser Pro Ser Asp Ile Leu Asp
385 390 395 400

Glu Lys Gln Ile Phe Ser Thr Ser Glu Met Leu Pro Asp Ser Asp Pro

405 410 415
 Ala Pro Ala Val Thr Leu Pro Asn Tyr Leu Phe Pro Ala Ser Glu Pro
 420 425 430

Asp Ala Leu Asn Arg Ala Gly Asp Thr Ser Asp Gln Glu Gly His Ser
 435 440 445

Leu Glu Glu Lys Ala Ser Arg Glu Glu Ser Ala Lys Lys Thr Gly Lys
 450 455 460

Ser Lys Lys Arg Ile Arg Lys Thr Lys Gly Asn Arg Ser Thr Ser Pro
 465 470 475 480

Val Thr Asp Pro Ser Ile Pro Ile Arg Lys Lys Ser Lys Asp Gly Lys
 485 490 495

Gly

<210> 2
<211> 1491
<212> DNA
<213> künstliche Sequenz

<223> Nukleotidsequenz von GFP-M&M

<400> 2		
atggtgagca agggcgagga gctgttcacc ggggtggtgc ccatcctgggt cgagctggac	60	
ggcgacgtaa acggccacaa gttcagcgtg tccggcgagg gcgagggcga tgccacctac	120	
ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggccccacc	180	
ctcgtgacca ccctgaccta cggcgtgcag tgcttcagcc gctaccccgaa ccacatgaag	240	
cagcacgact tcttcaagtc cgcctatgcacca gaaggctacg tccaggagcg caccatcttc	300	
ttcaaggacg acggcaacta caagaccgc gcccgtgtca agttcgaggg cgacaccctg	360	
gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac	420	
aagctggagt acaactacaa cagccacaac gtcttatatca tggccgacaa gcagaagaac	480	
ggcatcaagg tgaacttcaa gatccgccccac aacatcgagg acggcagcgt gcagctcgcc	540	
gaccactacc agcagaacac ccccatcgcc gacggcccccgt tgctgctgcc cgacacaccac	600	
tacctgagca cccagtccgc cctgagcaaa gaccccaacg agaagcgcga tcacatggtc	660	
ctgctggagt tcgtgaccgc cgccgggatc actctcggtca tggacgagct gtacaagggt	720	
accgtcatttgc ccaattatct gcccacccgg acagatgtgc agtgcacaca ccgtggcag	780	
aaagtgtca accctgaact catcaaagggt ccctggacca aagaagaaga tcagagagtc	840	
atagagcttg tccagaaata tggtccgaag cgttggctg ttattgccaa gcactaaaaa	900	

gggagaattt gaaagcagtgcgggagagg tggcacaacc atttgaatcc agaagttaag	960
aaaaccccttggacagaaga ggaggacaga atcatttacc aggcacacaa gcgtctgggg	1020
aacagatggg cagagatcgca aagctgctg cccggacgga ctgataatgc tatcaagaac	1080
cactggattt ccaccatgcg tcgcaagggtg gaacaggaag gctacggatc cgccacctcg	1140
cacaccatgt caaccgcgga agtcttactc aatatggagt ctcccagcga tatcctggat	1200
gagaagcaga tcttcagtac ctccgaaatg cttccagact cgaccctgc accagctgtc	1260
actctgcccc actacctgtt tcctgcctct gagcccgatg ccctgaacag ggccgggtgac	1320
actagtgacc aggagggca ttctctggag gagaaggct ccagagagga aagtgc当地 aagactggaa aatcaaagaa gagaatccgg aagaccaagg gcaaccgaag tacctcacct	1380
gtcactgacc ccagcatccc cattaggaag aaatcaaagg atggcaaagg c	1440
	1491

<210> 3

<211> 30

<212> DNA

<213> künstliche Sequenz

<223> Oligonukleotidprimer MEF-BamHI for

<400> 3

ataggatccg ccacctcgca caccatgtca

30

<210> 4

<211> 30

<212> DNA

<213> künstliche Sequenz

<223> Oligonukleotidprimer MEF-EcoRI rev

<400> 4

cagaatttcgc ctttgcacatc ctttgatttc

30

<210> 5

<211> 30

<212> DNA

<213> künstliche Sequenz

<223> Oligonukleotidprimer myb-KpnI for

<400> 5

cagagaggtt ccgtcattgc caatttatctg

30

<210> 6

<211> 30

<212> DNA

<213> künstliche Sequenz

<223> Oligonukleotidprimer myb-BamHI rev

<400> 6
cagagaggat ccgtggccctt cctgttccac 30

<210> 7
<211> 21
<212> DNA
<213> künstliche Sequenz
<223> Oligonukleotidprimer p14^{ARP}for

<400> 7
agtggctacg taagagtgtat cgc 23

<210> 8
<211> 18
<212> DNA
<213> künstliche Sequenz
<223> Oligonukleotidprimer p14^{ARP}rev

<400> 8
cttacagatc agacgtcaag ccc 23

<210> 9
<211> 22
<212> DNA
<213> künstliche Sequenz
<223> Oligonukleotidprimer c-kit for

<400> 9
actgttgttgc ttccgttc aa 22

<210> 10
<211> 20
<212> DNA
<213> künstliche Sequenz
<223> Oligonukleotidprimer c-kit rev

<400> 10
ttaagccccga tttcactgcc 20

<210> 11
<211> 4151
<212> DNA
<213> künstliche Sequenz
<223> cDNA EGFP

<400> 11
tagttattac tagcgctacc ggactcagat ctgcgagctca agcttcgaat tctgcagtcg 60
acggtaaccgc gggcccgaaa tccaccggtc gccaccatgg tgagcaaggg cgaggagctg 120

ttcacccgggg tggtgccat cctggtcag ctggacggcg acgtaaacgg ccacaagttc	180
agcgtgtccg gcgaggcgca gggcgatgcc acctacggca agctgaccct gaagttcatc	240
tgcaccaccc gcaagctgcc cgtgccctgg cccaccctcg tgaccaccct gacctacggc	300
gtgcagtgtc tcagccgcta ccccgaccac atgaagcagc acgacttctt caagtccgccc	360
atgcccgaag gctacgtcca ggagcgcacc atcttcttca aggacgacgg caactacaag	420
acccgcgccc aggtgaagtt cgagggcgac accctggta accgcattcga gctgaagggc	480
atcgacttca aggaggacgg caacatcctg gggcacaagc tggagtacaa ctacaacagc	540
cacaacgtct atatcatggc cgacaaggcag aagaacggca tcaagggtgaa cttcaagatc	600
cgccacaaca tcgaggacgg cagcgtgcag ctcgcccacc actaccagca gaacaccccc	660
atcggcgacg gccccgtgct gctgcccgc aaccactacc tgagcaccca gtccgcctg	720
agcaaagacc ccaacgagaa gcgcgatcac atggctctgc tggagttcgt gaccgcccgc	780
gggatcactc tcggcatgga cgagctgtac aagtaaagcg gccgcgactc tagatcataa	840
tcagccatac cacatttgta gaggtttac ttgctttaaa aaacctccca cacccccc	900
tgaacctgaa acataaaatg aatgcaattt ttgttgtttaa cttgtttatt gcagcttata	960
atggttacaa ataaagcaat agcatcacaat atttcacaaaa taaagcattt ttttcaactgc	1020
attctagttt tggtttgc aactcatca atgtatcttta aggcgttaat tgtaagcggt	1080
aatattttgt taaaattcgc gttaaatttt tgtaaatca gtcattttt taaccaatag	1140
gccgaaatcg gaaaaatccc ttataaatca aaagaataga ccgagatagg gttgagtgtt	1200
gttccagttt ggaacaagag tccactatta aagaacgtgg actccaacgt caaagggcgaa	1260
aaaaccgtct atcagggcgaa tggcccacta cgtgaaccat caccctaattc aagtttttg	1320
gggtcgaggt gccgtaaagc actaaatcg aaccctaaag ggagcccccg atttagagct	1380
tgacggggaa agccggcgaa cgtggcgaga aaggaaggaa agaaagcgaa aggagcgggc	1440
gctagggcgcc tggcaagtgt agcggtcacg ctgcgcgtaa ccaccacacc cgccgcgcct	1500
aatgcgcgc tacagggcgcc gtcaggtggc acttttggg gaaatgtgcg cggAACCCCT	1560
atttgtttat ttttctaaat acattcaaattt atgtatccgc tcatgagaca ataaccctga	1620
taaatgcttc aataatattt aaaaaggaag agtcctgagg cggaaagaac cagctgtgga	1680
atgtgtgtca gtttaggtgt ggaaagtccc caggctcccc agcaggcaga agtatgcaaa	1740
gcatgcattt caattagtca gcaaccagggt gtggaaagtc cccaggctcc ccagcaggca	1800
gaagtatgca aagcatgcat ctcaattagt cagcaaccat agtcccgc ctaactccgc	1860
ccatcccgcc cctaactccg cccagttccg cccattctcc gccccatggc tgactaattt	1920
tttttattttt tgcagaggcc gaggccgcct cggcctctga gctattccag aagtagtgag	1980

gaggctttt tggaggccta ggctttgca aagatcgatc aagagacagg atgaggatcg 2040
tttcgcata ttgaacaaga tggattgcac gcaggttctc cggccgctt ggtggagagg 2100
ctattcggt atgactgggc acaacagaca atcggctgct ctgatgccgc cgtgtccgg 2160
ctgtcagcgc agggcgccc ggttctttt gtcaagaccg acctgtccgg tgccctgaat 2220
gaactgcaag acgaggcage gcggctatcg tggctggcca cgacggcgt tccttgcgca 2280
gctgtgtcg acgttgtcac tgaagcggga agggactggc tgctattggg cgaagtgcgg 2340
gggcaggatc tcctgtcatc tcaccttgct cctgcccaga aagtatccat catggctgat 2400
gcaatgcgc ggctgcatac gtttgcatacg gctacctgcc cattcgacca ccaagcgaaa 2460
catcgcatcg agcgagcactg tactcgatg gaagccggc ttgtcgatca ggatgatctg 2520
gacgaagagc atcagggct cgcgcagcc gaactgttcg ccaggctcaa ggcgagcatg 2580
cccgacggcg aggatctcg tgcgtaccat ggcgtatgcct gcttgcgaa tatcatggtg 2640
gaaaatggcc gctttctgg attcatcgac tgtggccggc tgggtgtggc ggaccgctat 2700
caggacatac cggtggctac ccgtgatatt gctgaagagc ttggcggcga atgggctgac 2760
cgcttcctcg tgctttacgg tatacgccgt cccgattcgc agcgcatcgc cttctatcgc 2820
cttcttgacg agttttctcg agcgggactc tgggttcga aatgaccgac caagcgacgc 2880
ccaacctgcc atcacgagat ttgcattcca ccggccctt ctatgaaagg ttgggcttcg 2940
gaatcgttt ccgggacgccc ggctggatga tcctccagcg cggggatctc atgctggagt 3000
tcttcgccc ccctaggggg aggctaactg aaacacggaa ggagacaata ccggaaaggaa 3060
cccgcgctat gacggcaata aaaagacaga ataaaacgca cgggtttggg tcgtttgttc 3120
ataaacgcgg ggttcggtcc cagggctggc actctgtcga tacccaccg agaccccatt 3180
ggggccaata cgcccgctt tcttcctttt ccccacccca ccccccaagt tcgggtgaag 3240
gcccgaggct cgccagccaaac gtcggggcgg caggccctgc catagcctca ggttactcat 3300
atatacttta gattgattta aaacttcatt tttaatttaa aaggatctag gtgaagatcc 3360
tttttataa tctcatgacc aaaatccctt aacgtgagtt ttcgttccac tgagcgtcag 3420
accccgtaga aaagatcaa ggttctttt gagatccttt ttttctgcgc gtaatctgct 3480
gtttgcaac aaaaaaacca ccgttaccag cgggtggttt tttggccggat caagagctac 3540
caactttt tccgaaggta actggcttca gcagagcgc aataccaaat actgtccttc 3600
tagtgttagcc gtagtttaggc caccacttca agaactctgt agcaccgcct acataccctcg 3660
ctctgctaatt cctgttacca gttggctgctg ccagtggcga taagtcgtgt cttaccgggt 3720
tggactcaag acgatagttt ccggataagg cgcagcggc gggctgaacg gggggttcgt 3780
gcacacagcc cagttggag cgaacgacct acaccgaact gagataccta cagcgtgagc 3840

tatgagaaaag cgccacgctt cccgaaggga gaaaggcgga caggtatccg gtaagcggca 3900
gggtcggaac aggagagcgc acgagggagc ttccaggggg aaacgcctgg tatctttata 3960
gtcctgtcggttccac ctctgacttg agcgtcgatt tttgtatgc tcgtcagggg 4020
ggcggagcct atggaaaaaac gccagcaacg cggcctttt acggttcctg gcctttgct 4080
ggcctttgc tcacatgttc tttcctgcgt tatcccctga ttctgtggat aaccgtattta 4140
ccgccccatgcata 4151

<210> 12
<211> 1992
<212> DNA
<213> Homo sapiens

<223> cDNA MEF

<400> 12
atggcttatta ccctacagcc cagtgacacctg atctttgagt tcgcaagcaa cgggatggat 60
gatgatatatcc accagctgga agacccctct gtgttcccgat ctgtgatcggtt ggagcaggta 120
ccctaccctg atttactgca tctgtactcg ggactggagt tggacgacgt tcacaatggc 180
atcataaacag acgggacacctt gtgcatgacc caggatcaga tcctggaggagg cagtttttg 240
ctgacagatg acaatgagggc cacctcgac accatgtcaa ccgcggaaagt cttactcaat 300
atggagtctc ccagcgatata cctggatgag aagcagatct tcagtacctc cgaaatgctt 360
ccagactcg accctgcacc agctgtcaact ctgcccaact acctgtttcc tgccctctgag 420
cccgatgccc tgaacagggc gggtgacact agtgaccagg aggggcattc tctggaggag 480
aaggcctcca gagaggaaaag tgccaagaag actggaaat caaagaagag aatccggaaag 540
accaagggca accgaagtac ctcacctgtc actgacccca gcatccccat taggaagaaa 600
tcaaaggatg gcaaaggcag caccatctat ctgtggaggat tcctcctggc tcttctgcaa 660
gacagaaaaca cctgtcccaa gtacatcaag tggacccagc gagagaaaagg catcttcaaa 720
ctgggtggact ccaaagctgt gtccaaagctg tgggggaaagc agaaaaacaa gcctgacatg 780
aactatgaga caatggggcg ggcactaaga tactactacc aaagaggcat actggccaaa 840
gtggaaaggc agaggctggt gtaccagttt aaggagatgc ccaaggacct ggtggtcatt 900
gaagatgagg atgagagcag cgaagccaca gcagccccac ctcaggcctc cacggcctct 960
gtggcctctg ccagtaccac cggcgaaacc agctccaggg tctcatccag atctgcccc 1020
caggggcaagg gcagctttc ttggggagaag ccaaaaaattc agcatgtcggt tctccagcc 1080
tctgcagatc tgaaattggg accgtcgcta gacgaggaga tccccactac ctccaccatg 1140
ctcgtctctc cagcagaggg ccaggtaag ctcacccaaag ctgtgagtcg atcttcagtg 1200
cccagcaaca tccacctagg agtggccccc gtggggtcgg gctcggccct gaccctgcag 1260

acgatcccac	tgaccacgg	gtgaccaat	gggcctcctg	ccagtactac	tgctcccact	1320
cagctcgttc	tccagagtgt	tccagcggcc	tctactttca	aggacacacctt	cactttgcag	1380
gcctttcc	ccctgaacgc	cagttccaa	gacagccagg	tggcagcccc	aggggctcca	1440
ctgattctca	gtggcctccc	ccaacttctg	gctggggcca	accgtccgac	caacccggcg	1500
ccacccacgg	tcacaggggc	tggaccagca	gggcccagct	ctcagcccc	tgggactgtc	1560
attgctgcct	tcatcaggac	ttctggcact	acagcagccc	ctagggtcaa	ggaggggcca	1620
ctgaggtcct	cctcctatgt	tcagggtagt	gtgacggggg	ccccatgga	ggggctgctg	1680
gttcctgaag	agaccctgag	ggagctcctg	agagatcagg	ctcatctca	gccacttcca	1740
acccaggtgg	tttccagggg	ttcccacaat	ccgagccttc	tggcaacca	gactttgtct	1800
cctcccagcc	gccccactgt	tgggctgacc	ccagtggctg	aactttagct	ctcctcaggc	1860
tcagggtccc	tgctgatggc	tgagcctagt	gtgaccacat	ctgggagcct	tctgacaaga	1920
tcccccaccc	cagccccttt	ctccccattc	aaccctactt	ccctcattaa	gatggagccc	1980
catgacatat	aa					1992

<210>	13					
<211>	1913					
<212>	DNA					
<213>	Mus musculus					
<223>	cDNA c-myb					
<400>	13					
atggcccgga	gaccccgaca	cagcatctac	agtagcgatg	aagatgatga	agacatttag	60
atgtgtgacc	atgactacga	tgggctgctg	cccaaattctg	gaaagcgtca	cttggggaaa	120
actaggtgga	caagggaaaga	ggatgagaag	ctgaagaagc	tggtggaaaca	gaacggaaaca	180
gacgactgga	aagtatttgc	caatttatctg	cccaaccgga	cagatgtgca	gtgccaacac	240
cggtggcaga	aagtgctgaa	ccctgaactc	atcaaaggct	cctggaccaa	agaagaagat	300
cagagagtca	tagagcttgt	ccagaaatat	gttccgaagc	gttggctgt	tattgccaag	360
cacttaaaag	ggagaatttg	aaagcagtgt	cgggagaggt	ggcacaacca	tttgaatcca	420
gaagttaaga	aaacctcctg	gacagaagag	gaggacagaa	tcatttacca	ggcacacacaag	480
cgtctgggga	acagatgggc	agagatcgca	aagctgctgc	ccggacggac	tgataatgt	540
atcaagaacc	actggaattc	caccatgcgt	cgcaagggtgg	aacaggaagg	ctacctgcag	600
aagcttcca	aagccagcca	gacgccagtg	gccacgagct	tccagaagaa	caatcatttg	660
atggggtttgc	ggcatgcctc	acctccatct	cagctctctc	caagtggcca	gtcctccgtc	720
aacagcgaat	atccctatta	ccacatcgcc	gaagcacaaaa	acatctccag	tcacgttccc	780

tatcctgtcg cattgcatgt taatatagtc aacgtccctc agccggctgc ggcagccatc	840
cagagacact ataacgacga agaccctgag aaggaaaagc gaataaagga gctggagttg	900
ctcctgatgt caacagagaa cgagctgaag ggacagcagg cattaccaac acagaaccac	960
acttgcagct accccgggtg gcacagcacc tccattgtgg accagaccag acctcatggg	1020
gatagtgcac ctgtttcctg tttggagaa caccatgccca ccccatctct gcctgcagat	1080
cccggtccc tacctgaaga aagtgcctca ccagcaaggt gcatgatcgt ccaccaggc	1140
accattctgg acaatgttaa gaacctctta gaatttgcag aaacactcca gtttatagat	1200
tctttcttga acacttccag caaccatgaa aactcgggct tagatgcacc taccttaccc	1260
tccactcctc tcattggtca ccaaactgaca ccatgtcgag accagactgt gaaaacccag	1320
aaggaaaatt ccatcttag aactccagct atcaaaaaggt caatcctcga aagctctcct	1380
cgaactccca caccattcaa acatgccctt gcagctcaag aaattaaata cggccccctg	1440
aagatgctac ctcagacccc ctcccatgca gtggaggacc tacaagatgt gattaagcgg	1500
gaatcggatg aatctggaat tgttgctgag ttcaagaga gtggaccacc gttactgaaa	1560
aaaatcaagc aggccgtgga gtcgccaact gagaatcgg gaaacttctt ctgctcaaac	1620
cactggcag agaacagcct gagcacccaa ctgttctcgc aggctctcc tgtggcagat	1680
gccccaaata ttcttacaag ctctgttta atgacacctg tatcagaaga tgaagacaat	1740
gtcctcaaag ccttaccgt acctaagaac aggcccctgg tgggtccctt gcagccatgc	1800
agtggtgct gggagccagc atcctgtggg aagacagagg accagatgac ggcctccgg	1860
ccggctcgga aatacgtgaa cgcgttctca gtcgaactc tggcatgtg aga	1913